



<b>FORM PTO-1449 (Modified)</b> Approved for use through 10/31/2002 <b>INFORMATION DISCLOSURE CITATION</b> <b>in an Application</b> (Use several sheets if necessary)	US DEPARTMENT OF COMMERCE US Patent and Trademark Office	Docket No. <b>50623.370</b>	Application No. <b>10/772,858</b>
	Applicant <b>Syed F.A. Hossainy</b>		
	Filing Date <b>February 4, 2004</b>	Group Art Unit <b>4734 1762</b>	

**U.S. PATENT DOCUMENTS**

Examiner Initial	Ref. No.	Document Number	Date of Patent	Name	Class	Subclass	Filing Date If Appropriate
Ecc	A1	3,288,052	11/29/66	Hough	99	235	
	A2	4,148,932	4/10/79	Tada et al.	427	31	
	A3	4,275,838	6/30/81	Fangmeyer	239	223	
	A4	4,329,383	5/11/82	Joh	428	36	
	A5	4,589,597	5/20/86	Robisch et al.	239	703	
	A6	4,684,064	8/4/87	Kwok	239	223	
	A7	4,733,665	3/29/88	Palmaz	128	343	
	A8	4,795,095	1/3/89	Shepard	239	214.17	
	A9	4,800,882	1/31/89	Gianturco	128	343	
	A10	4,882,168	11/21/89	Casey et al.	424	468	
	A11	4,886,062	12/12/89	Wiktor	128	343	
	A12	4,927,081	5/22/90	Kwok et al.	239	223	
	A13	4,941,870	7/17/90	Okada et al.	600	36	
	A14	4,977,901	12/18/90	Ofstead	128	772	
	A15	5,112,457	5/12/92	Marchant	204	165	
	A16	5,165,919	11/24/92	Sasaki et al.	424	488	
	A17	5,272,012	12/21/93	Opolski	428	423.1	
	A18	5,292,516	3/8/94	Viegas et al.	424	423	
	A19	5,298,260	3/29/94	Viegas et al.	424	486	
	A20	5,300,295	4/5/94	Viegas et al.	424	427	
	A21	5,306,501	4/26/94	Viegas et al.	424	423	
	A22	5,328,471	7/12/94	Slepian	604	101	
	A23	5,330,768	7/19/94	Park et al.	424	501	
	A24	5,380,299	1/10/95	Fearnot et al.	604	265	
	A25	5,399,198	3/21/95	Ghaisas	118	629	
Ecc	A26	5,417,981	5/23/95	Endo et al.	424	486	

Ecc	A27	5,447,724	9/5/95	Helmus et al.	424	426	
	A28	5,455,040	10/3/95	Marchant	424	426	
	A29	5,462,990	10/31/95	Hubbell et al.	525	54.1	
	A30	5,464,650	11/7/95	Berg et al.	427	2.30	
	A31	5,569,463	10/29/96	Helmus et al.	424	426	
	A32	5,578,073	11/26/96	Haimovich et al.	623	1	
	A33	5,605,696	2/25/97	Eury et al.	424	423	
	A34	5,609,629	3/11/97	Fearnot et al.	623	1	
	A35	5,624,411	4/29/97	Tuch	604	265	
	A36	5,628,730	5/13/97	Shapland et al.	604	21	
	A37	5,649,977	7/22/97	Campbell	623	1	
	A38	5,658,995	8/19/97	Kohn et al.	525	432	
	A39	5,667,767	9/16/97	Greff et al.	424	9.411	
	A40	5,670,558	9/23/97	Onishi et al.	523	112	
	A41	5,679,400	10/21/97	Tuch	427	2.14	
	A42	5,700,286	12/23/97	Tartaglia et al.	623	1	
	A43	5,702,754	12/30/97	Zhong	427	2.12	
	A44	5,716,981	2/10/98	Hunter et al.	514	449	
	A45	5,735,897	4/7/98	Buirge	623	12	
	A46	5,746,998	5/5/98	Torchilin et al.	424	9.4	
	A47	5,776,184	7/7/98	Tuch	623	1	
	A48	5,788,979	8/4/98	Alt et al.	424	426	
	A49	5,800,392	9/1/98	Racchini	604	96	
	A50	5,820,917	10/13/98	Tuch	427	2.1	
	A51	5,824,048	10/20/98	Tuch	623	1	
	A52	5,824,049	10/20/98	Ragheb et al.	623	1	
	A53	5,830,178	11/3/98	Jones et al.	604	49	
	A54	5,837,008	11/17/98	Berg et al.	623	1	
	A55	5,837,313	11/17/98	Ding et al.	427	2.21	
	A56	5,851,508	12/22/98	Greff et al.	424	9.411	
Ecc	A57	5,858,746	1/12/99	Hubbell et al.	435	177	

ECC	A58	5,865,814	2/2/99	Tuch	604	265	
	A59	5,869,127	2/9/99	Zhong	427	2.12	
	A60	5,873,904	2/23/99	Ragheb et al.	623	1	
	A61	5,876,433	3/2/99	Lunn	623	1	
	A62	5,877,224	3/2/99	Brocchini et al.	514	772.2	
	A63	5,925,720	7/20/99	Kataoka et al.	525	523	
	A64	5,955,509	9/21/99	Webber et al.	514	772.7	
	A65	5,957,974	9/28/99	Thompson et al.	623	1.13	
	A66	5,971,954	10/26/99	Conway et al.	604	96	
	A67	5,980,928	11/9/99	Terry	424	427	
	A68	5,980,972	11/9/99	Ding	427	2.24	
	A69	5,997,517	12/7/99	Whitbourne	604	265	
	A70	6,010,530	1/4/00	Goicoechea	623	1	
	A71	6,015,541	1/18/00	Greff et al.	424	1.25	
	A72	6,033,582	3/7/00	Lee et al.	216	37	
	A73	6,042,875	3/28/00	Ding et al.	427	2.24	
	A74	6,045,864	4/4/00	Lyons et al.	427	255.23	
	A75	6,051,648	4/18/00	Rhee et al.	525	54.1	
	A76	6,051,576	4/18/00	Ashton et al.	514	255	
	A77	6,056,993	5/2/00	Leidner et al.	427	2.25	
	A78	6,060,451	5/9/00	DiMaio et al.	514	13	
	A79	6,060,518	5/9/00	Kabanov et al.	514	781	
	A80	6,080,488	6/27/00	Hostettler et al.	428	423.3	
	A81	6,096,070	8/1/00	Ragheb et al.	623	1	
	A82	6,099,562	8/8/00	Ding et al.	623	1.46	
	A83	6,110,188	8/29/00	Narciso, Jr.	606	153	
	A84	6,110,483	8/29/00	Whitbourne et al.	424	423	
	A85	6,113,629	9/5/00	Ken	623	1.1	
	A86	6,120,536	9/19/00	Ding et al.	623	1.43	
	A87	6,120,904	9/19/00	Hostettler et al.	428	423.3	
	A88	6,121,027	9/19/00	Clapper et al.	435	180	
ECC	A89	6,129,761	10/10/00	Hubbell	623	11	

Ecc	A90	6,153,252	11/28/00	Hossainy et al.	427	2.3	
	A91	6,165,212	12/26/00	Dereume et al.	623	1.13	
	A92	6,189,804	2/20/01	Vetter et al.	239	7	
	A93	6,203,551	3/20/01	Wu	606	108	10/4/99
	A94	6,231,600	5/15/01	Zhong	623	1.42	5/26/99
	A95	6,240,616	6/5/01	Yan	29	527.2	4/15/97
	A96	6,245,753	6/12/01	Byun et al.	514	56	4/27/99
	A97	6,251,136	6/26/01	Guruwaiya et al.	623	1.46	12/8/99
	A98	6,254,632	7/3/01	Wu et al.	623	1.15	9/28/00
	A99	6,258,121	7/10/01	Yang et al.	623	1.46	7/2/99
	A100	6,267,073	7/31/01	Busse et al.	118	24	9/2/98
	A101	6,283,947	9/4/01	Mirzaee	604	264	7/13/99
	A102	6,283,949	9/4/01	Roorda	604	288.02	12/27/99
	A103	6,284,305	9/4/01	Ding et al.	427	2.28	5/18/00
	A104	6,287,628	9/11/01	Hossainy et al.	427	2.3	9/3/99
	A105	6,299,604	10/9/01	Ragheb et al.	604	265	8/20/99
	A106	6,306,176	10/23/01	Whitbourne	623	23.59	9/21/99
	A107	6,331,313	12/18/01	Wong et al.	424	427	10/22/99
	A108	6,335,029	1/1/02	Kamath et al.	424	423	12/3/98
	A109	6,346,110	2/12/02	Wu	606	108	1/3/01
	A110	6,358,556	3/19/02	Ding et al.	427	2.24	1/23/98
	A111	6,379,381	4/30/02	Hossainy et al.	623	1.42	9/3/99
	A112	6,395,326	5/28/02	Castro et al.	427	2.24	5/31/00
	A113	6,419,692	7/16/02	Yang et al.	623	1.15	2/3/99
	A114	6,451,373	9/17/02	Hossainy et al.	427	2.25	8/4/00
	A115	6,494,862	12/17/02	Ray et al.	604	96.01	12/30/99
	A116	6,503,556	1/7/03	Harish et al.	427	2.24	12/28/00
	A117	6,503,954	1/7/03	Bhat et al.	514	772.2	7/21/00
Ecc	A118	6,506,437	1/14/03	Harish et al.	427	2.25	10/17/00

Ecc	A119	6,527,801	3/4/03	Dutta	623	1.46	4/13/00
	A120	6,527,863	3/4/03	Pacetti et al.	118	500	6/29/01
	A121	6,540,776	4/1/03	Sanders Millare et al.	623	1.15	12/28/00
	A122	6,544,223	4/8/03	Kokish	604	103.01	1/5/01
	A123	6,544,543	4/8/03	Mandrusov et al.	424	422	12/27/00
	A124	6,544,582	4/8/03	Yoe	427	2.24	1/5/01
	A125	6,555,157	4/29/03	Hossainy	427	2.24	7/25/00
	A126	6,558,733	5/6/03	Hossainy et al.	427	2.24	10/26/00
	A127	6,565,659	5/20/03	Pacetti et al.	118	500	6/28/01
	A128	6,572,644	6/3/03	Moein	623	1.11	6/27/01
	A129	6,585,765	7/1/03	Hossainy et al.	623	1.45	6/29/00
	A130	6,585,926	7/1/03	Mirzaee	264	400	8/31/00
Ecc	A131	6,605,154	8/12/03	Villareal	118	500	5/31/01

### U.S. PATENT APPLICATION PUBLICATION DOCUMENTS

Examiner Initial	Ref. No.	Document Number	Date of Publication	Name	Class	Subclass	Filing Date If Appropriate
Ecc	A132	2001/0018469	8/30/01	Chen et al.	523	121	12/28/00
Ecc	A133	2001/0037145	11/1/01	Guruwaiya et al.	623	1.15	6/21/01
Ecc	A134	2002/0077693	6/20/02	Barclay et al.	623	1.13	12/19/00
Ecc	A135	2002/0091433	7/11/02	Ding et al.	623	1.2	12/17/01
Ecc	A136	2002/0155212	10/24/02	Hossainy	427	2.25	4/24/01
Ecc	A137	2003/0065377	4/3/03	Davila et al.	623	1.13	4/30/02
Ecc	A138	2003/0099712	5/29/03	Jayaraman	424	486	11/26/01

### FOREIGN PATENT DOCUMENTS

Examiner Initial	Ref. No.	Document Number	Date of Publication	Country	Class	Subclass	Translation	
							Yes	No
Ecc	B1	EP 0 301 856	2/1/89	European	—	—		
Ecc	B2	EP 0 514 406	11/25/92	European	—	—		
Ecc	B3	EP 0 604 022	6/29/94	European	—	—		
Ecc	B4	EP 0 623 354	11/9/94	European	—	—		
Ecc	B5	EP 0 665 023	8/2/95	European	—	—		
Ecc	B6	EP 0 701 802	3/20/96	European	—	—		
Ecc	B7	EP 0 716 836	6/19/96	European	—	—		

ECC	B8	EP 0 809 999	12/3/97	European	—	—		
	B9	EP 0 832 655	4/1/98	European	—	—		
	B10	EP 0 850 651	7/1/98	European	—	—		
	B11	EP 0 879 595	11/25/98	European	—	—		
	B12	EP 0 910 584	4/28/99	European	—	—		
	B13	EP 0 923 953	6/23/99	European	—	—		
	B14	EP 0 953 320	11/3/99	European	—	—		
	B15	EP 0 970 711	1/12/00	European	—	—		
	B16	EP 0 982 041	3/1/00	European	—	—		
	B17	EP 1 273 314	1/8/03	European	—	—		
	B18	2001-190687	7/17/01	Japan (Abstract)	—	—	X	
	B19	WO 91/12846	9/5/91	PCT	—	—		
	B20	WO 95/10989	4/27/95	PCT	—	—		
	B21	WO 96/40174	12/19/96	PCT	—	—		
	B22	WO 97/10011	3/20/97	PCT	—	—		
	B23	WO 97/45105	12/4/97	PCT	—	—		
	B24	WO 97/46590	12/11/97	PCT	—	—		
	B25	WO 98/17331	4/30/98	PCT	—	—		
	B26	WO 98/36784	8/27/98	PCT	—	—		
	B27	WO 99/01118	1/14/99	PCT	—	—		
	B28	WO 99/38546	8/5/99	PCT	—	—		
	B29	WO 99/63981	12/16/99	PCT	—	—		
	B30	WO 00/02599	1/20/00	PCT	—	—		
	B31	WO 00/12147	3/9/00	PCT	—	—		
	B32	WO 00/18446	4/6/00	PCT	—	—		
	B33	WO 00/64506	11/2/00	PCT	—	—		
	B34	WO 01/01890	1/11/01	PCT	—	—		
	B35	WO 01/15751	3/8/01	PCT	—	—		
	B36	WO 01/17577	3/15/01	PCT	—	—		
	B37	WO 01/45763	6/28/01	PCT	—	—		
ECC	B38	WO 01/49338	7/12/01	PCT	—	—		

Ecc	B39	WO 01/74414	10/11/01	PCT	—	—		
	B40	WO 02/03890	1/17/02	PCT	—	—		
	B41	WO 02/026162	4/4/02	PCT	—	—		
	B42	WO 02/34311	5/2/02	PCT	—	—		
	B43	WO 02/056790	7/25/02	PCT	—	—		
	B44	WO 03/000308	1/3/03	PCT	—	—		
	B45	WO 03/022323	3/20/03	PCT	—	—		
	B46	WO 03/028780	4/10/03	PCT	—	—		
	B47	WO 03/037223	5/8/03	PCT	—	—		
Ecc	B48	WO 03/039612	5/15/03	PCT	—	—		

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, etc.)

Ecc	C1	Anonymous, <i>Cardiologists Draw - Up The Dream Stent</i> , Clinica 710:15 (June 17, 1996), <a href="http://www.dialogweb.com/cgi/document?req=1061848202959">http://www.dialogweb.com/cgi/document?req=1061848202959</a> , printed 8/25/03 (2 pages).						
	C2	Anonymous, <i>Heparin-coated stents cut complications by 30%</i> , Clinica 732:17 (Nov. 18, 1996), <a href="http://www.dialogweb.com/cgi/document?req=1061847871753">http://www.dialogweb.com/cgi/document?req=1061847871753</a> , printed 8/25/03 (2 pages).						
	C3	Anonymous, <i>Rolling Therapeutic Agent Loading Device for Therapeutic Agent Delivery or Coated Stent</i> (Abstract 434009), Res. Disclos. pp. 974-975 (June 2000).						
	C4	Anonymous, <i>Stenting continues to dominate cardiology</i> , Clinica 720:22 (Sept. 2, 1996), <a href="http://www.dialogweb.com/cgi/document?req=1061848017752">http://www.dialogweb.com/cgi/document?req=1061848017752</a> , printed 8/25/03 (2 pages).						
	C5	Aoyagi et al., <i>Preparation of cross-linked aliphatic polyester and application to thermo-responsive material</i> , Journal of Controlled Release 32:87-96 (1994).						
	C6	Barath et al., <i>Low Dose of Antitumor Agents Prevents Smooth Muscle Cell Proliferation After Endothelial Injury</i> , JACC 13(2): 252A (Abstract) (Feb. 1989).						
	C7	Barbucci et al., <i>Coating of commercially available materials with a new heparinizable material</i> , J. Biomed. Mater. Res. 25:1259-1274 (Oct. 1991).						
	C8	Chung et al., <i>Inner core segment design for drug delivery control of thermo-responsive polymeric micelles</i> , Journal of Controlled Release 65:93-103 (2000).						
	C9	Dev et al., <i>Kinetics of Drug Delivery to the Arterial Wall Via Polyurethane-Coated Removable Nitinol Stent: Comparative Study of Two Drugs</i> , Catheterization and Cardiovascular Diagnosis 34:272-278 (1995).						
	C10	Dichek et al., <i>Seeding of Intravascular Stents with Genetically Engineered Endothelial Cells</i> , Circ. 80(5):1347-1353 (Nov. 1989).						
	C11	Eigler et al., <i>Local Arterial Wall Drug Delivery from a Polymer Coated Removable Metallic Stent: Kinetics, Distribution, and Bioactivity of Forskolin</i> , JACC, 4A (701-1), Abstract (Feb. 1994).						
	C12	Helmus, <i>Overview of Biomedical Materials</i> , MRS Bulletin, pp. 33-38 (Sept. 1991).						
	C13	Herdeg et al., <i>Antiproliferative Stent Coatings: Taxol and Related Compounds</i> , Semin. Intervent. Cardiol. 3:197-199 (1998).						
	C14	Inoue et al., <i>An AB block copolymer of oligo(methyl methacrylate) and poly(acrylic acid) for micellar delivery of hydrophobic drugs</i> , Journal of Controlled Release 51:221-229 (1998).						
	C15	Kataoka et al., <i>Block copolymer micelles as vehicles for drug delivery</i> , Journal of Controlled Release 24:119-132 (1993).						
Ecc	C16	Levy et al., <i>Strategies For Treating Arterial Restenosis Using Polymeric Controlled Release Implants</i> , Biotechnol. Bioact. Polym. [Proc. Am. Chem. Soc. Symp.], pp. 259-268 (1994).						

ECC	C17	Liu et al., <i>Drug release characteristics of unimolecular polymeric micelles</i> , Journal of Controlled Release 68:167-174 (2000).
	C18	Marconi et al., <i>Covalent bonding of heparin to a vinyl copolymer for biomedical applications</i> , Biomaterials 18(12):885-890 (1997).
	C19	Matsumaru et al., <i>Embolic Materials For Endovascular Treatment of Cerebral Lesions</i> , J. Biomater. Sci. Polymer Edn 8(7):555-569 (1997).
	C20	Miyazaki et al., <i>Antitumor Effect of Implanted Ethylene-Vinyl Alcohol Copolymer Matrices Containing Anticancer Agents on Ehrlich Ascites Carcinoma and P388 Leukemia in Mice</i> , Chem. Pharm. Bull. 33(6) 2490-2498 (1985).
	C21	Miyazawa et al., <i>Effects of Pemirolast and Tranilast on Intimal Thickening After Arterial Injury in the Rat</i> , J. Cardiovasc. Pharmacol., pp. 157-162 (1997).
	C22	Nordrehaug et al., <i>A novel biocompatible coating applied to coronary stents</i> , European Heart Journal 14, p. 321 (P1694), Abstr. Suppl. (1993).
	C23	Ohsawa et al., <i>Preventive Effects of an Antiallergic Drug, Pemirolast Potassium, on Restenosis After Percutaneous Transluminal Coronary Angioplasty</i> , American Heart Journal 136(6):1081-1087 (Dec. 1998).
	C24	Ozaki et al., <i>New Stent Technologies</i> , Progress in Cardiovascular Diseases, Vol. XXXIX(2):129-140 (Sept./Oct. 1996).
	C25	Pechar et al., <i>Poly(ethylene glycol) Multiblock Copolymer as a Carrier of Anti-Cancer Drug Doxorubicin</i> , Bioconjugate Chemistry 11(2):131-139 (Mar./Apr. 2000).
	C26	Peng et al., <i>Role of polymers in improving the results of stenting in coronary arteries</i> , Biomaterials 17:685-694 (1996).
	C27	Shigeno, <i>Prevention of Cerebrovascular Spasm By Bosentan, Novel Endothelin Receptor</i> , Chemical Abstract 125:212307 (1996).
	C28	van Beusekom et al., <i>Coronary stent coatings</i> , Coronary Artery Disease 5(7):590-596 (July 1994).
	C29	Wilensky et al., <i>Methods and Devices for Local Drug Delivery in Coronary and Peripheral Arteries</i> , Trends Cardiovasc. Med. 3(5):163-170 (1993).
ECC	C30	Yokoyama et al., <i>Characterization of physical entrapment and chemical conjugation of adriamycin in polymeric micelles and their design for in vivo delivery to a solid tumor</i> , Journal of Controlled Release 50:79-92 (1998).
EXAMINER		ERMA CAMERON
		DATE CONSIDERED 9/6/05
EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		